

REMARKS

Applicant respectfully requests reconsideration of the Office action dated June 6, 2005 in view of the foregoing amendments and the following remarks.

Claim 1 and its Dependent Claims

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Jacobsen et al. (U.S. Patent No. 5,833,632), March et al. (U.S. Patent No. 5,997,525), and Aldrich et al. (U.S. Patent No. 5,489,269); and under 35 U.S.C. § 102(e) as being anticipated by Paskar (U.S. Patent No. 6,623,449) and Goll (U.S. Patent No. 6,344,027). Claims 2-7, 9-18, and 33-39, which all depend directly or indirectly from claim 1, stand variously rejected under 35 U.S.C. § 102(b) and/or (e) based on the above five references. Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over any of the above five references. As explained below, Applicant disagrees with the rejections but has nonetheless made certain claim amendments to clarify what Applicant regards as his invention.

Applicant has amended claim 1 to further clarify the term “rigid.” In particular, amongst other structure, amended claim 1 recites a rigid end effector having a longitudinal axis configured into a shape, where the end effector is sufficiently rigid to maintain the shape of its longitudinal axis during use. Applicant respectfully disagrees with Examiner’s assertion that the term “rigid” is not limiting. Applicant submits that the term “rigid” is limiting in light of the distinction between “rigid” and “malleable and/or manipulatable” that is provided on page 12 of the specification. A malleable and/or manipulatable end effector may be adapted “to form around or within anatomical

structures” during use. In particular, in a malleable and/or manipulatable end effector, the shape of the longitudinal axis may be altered during use such that the end effector may be steered or guided around or within anatomical structures during some laparoscopic, thoracoscopic, or arthroscopic procedures. In contrast to a malleable and/or manipulatable end effector, a rigid end effector, as recited in claim 1, is sufficiently rigid to maintain the shape of its longitudinal axis during use.

Referring first to the Jacobsen patent, Jacobsen does not disclose, teach, or suggest a device having a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as recited in amended claim 1. Instead, the only structure in Jacobsen that may be considered an end effector is the tubular guide wire 320 shown in Fig. 1. As provided in the abstract, the Jacobsen guide wire is designed to provide a catheter with “guidance to a target location in a vasculature passageway of a body.” In particular, as described at col. 3, lines 4-5, Jacobsen discloses that “the shape of the guide wire can be controlled to a certain extent while disposed in vasculature or body cavities.” Thus, rather than being rigid, the Jacobsen guide wire is malleable and/or manipulatable to allow ready navigation through the vasculature by altering or manipulating the shape of the longitudinal axis of the guide wire during use. Accordingly, Jacobsen does not disclose a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as described and claimed in the present application.

Referring now to the March patent, March does not disclose, teach, or suggest a device having a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as recited in amended claim 1. Instead, as shown in the

various figures and described at col. 2, lines 62-63 and col. 4, lines 31-36, March discloses a flexible lasing transmission means that includes a flexible catheter 10. March's flexible catheter 10 is adapted to be introduced into "the patient's arterial system, generally through the femoral artery" such as to "facilitate introduction of the distal end of catheter 10 into the patient's left ventricle." Thus, rather than being rigid, the flexible catheter of March is malleable and/or manipulatable to allow the distal end to be readily introduced into the patient's left ventricle along a route passing through the femoral artery, the iliac artery, and the aortic arch. Navigation of a flexible catheter through the femoral and iliac arteries and the aortic arch requires that the shape of the catheter's longitudinal axis be altered or manipulated during use. Accordingly, March does not disclose a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as described and claimed in the present application.

Regarding the Aldrich patent, Aldrich does not disclose, teach, or suggest a device having a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as recited in amended claim 1. In contrast, as shown in Figs. 1, 2, and 5 and described at col. 4, lines 2-28, the Aldrich patent discloses a flexible catheter 10 that includes "a flexible elongated member 11 and a lockable sleeve 26 positioned at the proximal end thereof, both formed from flexible plastic material tubes of different diameters." Thus, as described at col. 4, lines 5-6 and 65-66 and represented in Figs. 1 and 2, rather than being rigid, Aldrich's flexible elongated tube member is malleable and/or manipulatable to allow the distal portion of the flexible catheter to be manipulated into a "desired loop or pigtail configuration" by altering the shape of the

longitudinal axis of the flexible catheter during use. Accordingly, Aldrich does not disclose a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as described and claimed in the present application.

Referring now to the Paskar patent, Paskar does not disclose, teach, or suggest a device having a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as recited in amended claim 1. Instead, as shown in various figures and described throughout the specification, Paskar discloses a reformable catheter having a longitudinal axis that is easily reshaped during use. For example, as described at col. 2, lines 36-41, Paskar discloses a transformable catheter that “can be easily and simply reshaped into a variety of different shapes as desired by the user” and can “be reformed in the body to other desired shapes.” Further, as described at col. 13, lines 32-37, Paskar’s catheter is a “curvable surgical element” having a “curvable or deflectable distal tip.” Thus, rather than being rigid, the transformable catheter of Paskar is malleable and/or manipulatable to allow the catheter to be “reformed in the body to other desired shapes” by altering or manipulating the shape of the catheter’s longitudinal axis during use. Accordingly, Paskar does not disclose a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as described and claimed in the present application.

Referring now to the Goll patent, Goll does not disclose, teach, or suggest a device having a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as recited in amended claim 1. Instead, as described at col. 4, lines 14-25, Goll discloses a device having an elongate shaft 14 with a flexibility

“suitable for navigation from a remote access site to the treatment site within the human body.” In particular, the elongate shaft of Goll is sufficiently flexible for “intravascular navigation to the coronary tissue from a remote access site in the femoral artery,” which requires transiting the aortic arch, or for “transthoracic navigation to the coronary tissue from a remote access point in the upper thorax.” Thus, rather than being rigid, the elongate shaft of Goll is malleable and/or manipulatable to permit intravascular or transthoracic navigation of the elongate shaft to the coronary tissue from a remote access site. Either type of navigation requires alteration or manipulation of the shape of the longitudinal axis of the elongate shaft during use. Accordingly, Goll does not disclose a rigid end effector that is sufficiently rigid to maintain the shape of its longitudinal axis during use, as described and claimed in the present application.

For at least the reasons discussed above, the cited references do not disclose, teach or suggest a device as claimed in amended claim 1. Claims 2-18 and 33-39 contain further limitations that distinguish the cited references. Accordingly, amended claim 1 and its dependent claims patentably distinguish the cited art, and Applicant respectfully requests that the rejections of claims 1-18 and 33-39 under 35 U.S.C. §§ 102 and 103 be withdrawn.

Applicant has added new claims 40-43, which depend from claim 1. Support for the new claims can be found throughout the specification as filed and no new matter is added. Applicant believes that claim 1 is now allowable. Therefore, new claims 40-43 are similarly allowable.

Claim 19 and its Dependent Claims

Claim 19 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Jacobsen et al. (U.S. Patent No. 5,833,632), March et al. (U.S. Patent No. 5,997,525), and Aldrich et al. (U.S. Patent No. 5,489,269); and under 35 U.S.C. § 102(e) as being anticipated by Paskar (U.S. Patent No. 6,623,449) and Goll (U.S. Patent No. 6,344,027). Claims 20-25, which all depend directly or indirectly from claim 19, stand variously rejected under 35 U.S.C. § 102(b) and/or (e) based on the above five references. Applicant disagrees with the rejections but has nonetheless made certain claim amendments to clarify what Applicant regards as his invention. For at least reasons similar to those stated above, Applicant respectfully submits that claims 19-25 patentably distinguish the cited references, and requests withdrawal of the rejections of those claims.

CONCLUSION

In view of the above amendments and remarks, applicant believes that this application is now in condition for allowance. Accordingly, Applicant respectfully requests that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.